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First record of *Heteropoda lunula* (Doleschall, 1857) from China (Araneae: Sparassidae)

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Abstract: This paper reports the first distribution record of *Heteropoda lunula* (Doleschall, 1857) (Sparassidae Bertkau, 1872) from China, based on a male specimen collected in Yingjiang County, Yunnan Province. Diagnostic morphological characters are illustrated.

Keywords: Heteropodinae, morphological variation, Tongbiguan Nature Reserve

新月巨蟹蛛 *Heteropoda lunula* 在中国的新纪录（蜘蛛目：巨蟹蛛科）

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摘要：基于采自云南省盈江县的一号雄性标本，报道了新月巨蟹蛛（*Heteropoda lunula* (Doleschall, 1857)）在中国的新分布纪录。提供了该物种的形态特征彩图和手绘图。

关键词：巨蟹蛛亚科，形态学变异，云南铜壁关自然保护区

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Introduction

Heteropoda lunula (Doleschall, 1857) is a widespread, somewhat synanthropic huntsman spider (family Sparassidae Bertkau, 1872) found from eastern India (Assam) to Indonesia (Tikader & Sethi 1990; Jäger 2002; Jäger & Koh 2024; World Spider Catalog 2026). Given its widespread occurrence in Southeast Asia, it is reasonable to hypothesize its presence in China's southwestern border regions, yet formal records have been absent until now. Here, we present a male specimen of *H. lunula* that was collected in Yunnan, China, near the border with Myanmar. This represents the first record of this species in the spider fauna of China. Meanwhile, the first high-quality genital photographs of both sexes based on specimens from China and Singapore are presented, to complement the morphological documentation. The Singaporean specimens are not a record for China but serve as essential comparative material for species identification and future studies.

Material and methods

All specimens preserved in 75% ethanol were examined and measured using a Leica M205A stereo microscope. Female epigyne was cleared with Pancreatin (BBI Life Sciences). The photographs of genitalia were taken with an Olympus BX53 microscope equipped with a Kuy Nice CCD Camera; of the somatic features were taken by a SONY Alpha 7R camera. Photographs of specimens were stacked by the Helicon Focus 8 software and retouched in the Adobe Photoshop CC 2020 software. Genital features were drawn under the drawing tube of the Leica M205A stereo microscope. Total length is the sum of the lengths of the prosoma and the opisthosoma, not including chelicerae. All measurements are in millimeters (mm). Distribution of *Heteropoda lunula* (Doleschall, 1857) from China and nearby regions were mapped using ArcMap 10.5 (Esri Inc.). All specimens used in this study are deposited in the Museum of Hebei University, Baoding, China (MHBU).

Abbreviations: **AB** anterior bands of epigyne; **C** conductor; **CO** copulatory opening; **dRTA** dorsal branch of retrolateral tibial apophysis; **E** embolus; **NHMW** Naturhistorisches Museum Wien, Austria; **FD** fertilization duct; **FW** first winding of internal duct system; **LL** lateral lobes of epigyne; **MS** median septum; **PP** posterior part of internal duct system; **RTA** retrolateral tibial apophysis; **S** spermophor; **SS** slit sensillum; **ST** subtegulum; **T** tegulum; **vRTA** ventral branch of retrolateral tibial apophysis.

Taxonomy

Heteropoda lunula (Doleschall, 1857) 新月巨蟹蛛

Figs 1–4

Olios lunula Doleschall, 1857: 428.

Heteropoda lunula (Doleschall, 1857): Jäger 2002: 49, figs 106–117; Jäger 2006: 53, fig. 9; Jäger & Koh 2024: 17, figs 67–71.

For the full list, see World Spider Catalog (2026).

Type material. Holotype ♀ (NHMW 1858.1.30; PJ 881), Java, not examined.

Material examined. CHINA: 1 ♂, Yunnan, Yingjiang County, Tongbiguan Nature Reserve, Nabang, VII.2025, leg. An-Ru Zuo, reared to maturity in XI.2025. **SINGAPORE:** 1 ♂, 1 ♀, Bukit Timah Nature Reserve, 31.VIII.1967, leg. D.H. Murphy.

Diagnosis and description. See Jäger (2002: 49).

Variation. Total length: males 15.23–21.20, females 26.30–34.00. The Singaporean male in this study represents the smallest measured male of the species to date (total length 15.23; the previously known smallest was 18.60, see Jäger 2002: 49); the Yunnan male and Singaporean female fall within the previously known range.

FIGURE 1. *Heteropoda lunula* (Doleschall, 1857), living male from Yunnan, China: **A** habitus, dorsal view **B** prosoma, frontal view.

Male palp: Compared to males from Singapore and Vietnam, the Yunnan male has a slightly broader base of the embolus that connects more smoothly to the tegulum; the conductor is more rounded and blunter at the tip; and the retrolateral edge of the tegulum is relatively smooth in ventral view (for the Vietnamese male, see Jäger 2002: fig. 107). In ventral view, the distal part of the dorsal branch of the RTA (dRTA) is either slightly inclined inward (Fig. 3E) or relatively straight (Fig. 3F). The distal part of the ventral branch of the RTA (vRTA) is relatively rounded and blunt (Figs 3B, E) or somewhat sharp (Figs 3F–G).

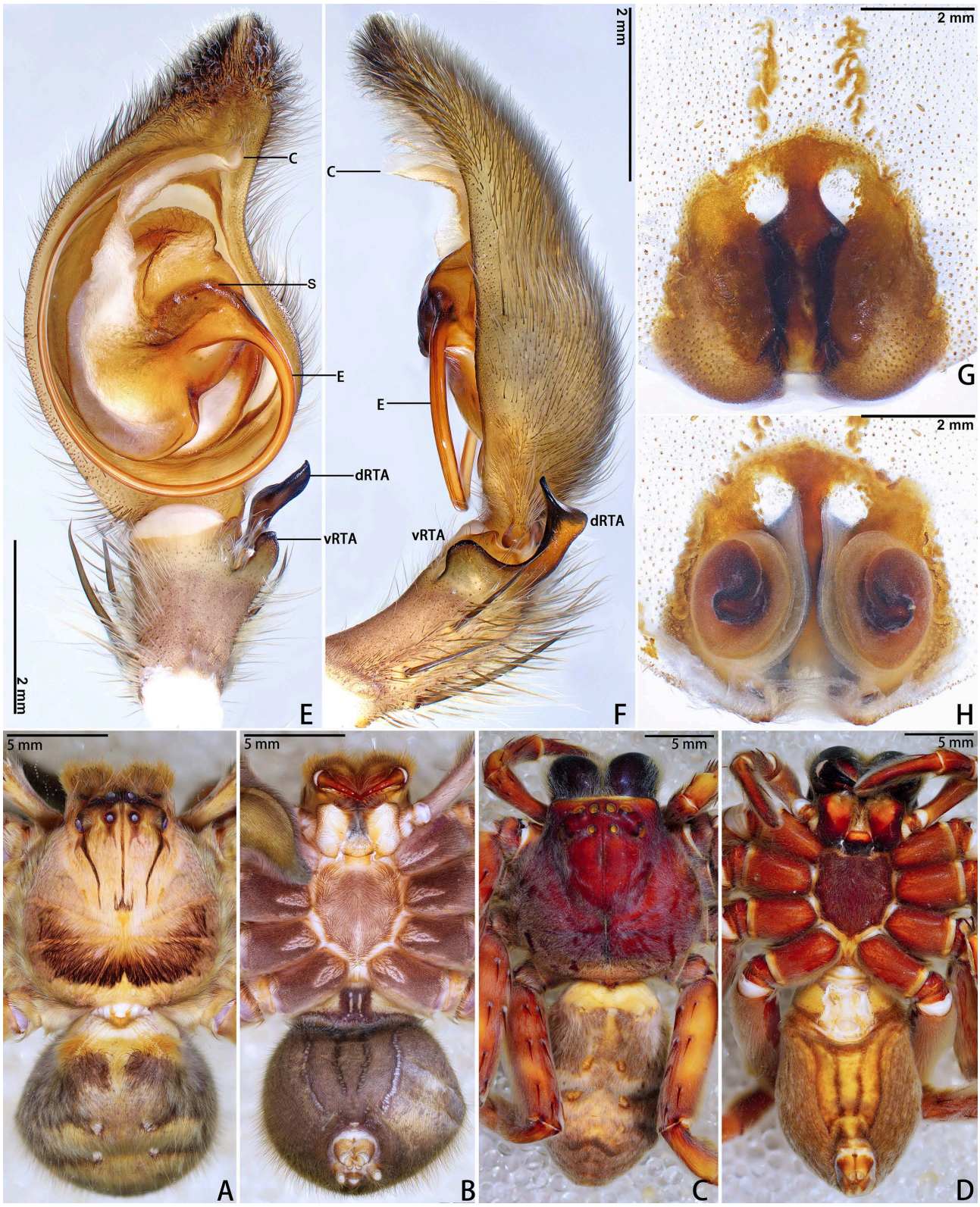

FIGURE 2. *Heteropoda lunula* (Doleschall, 1857), male from Yunnan, China (A–B, E–F) and female from Singapore (C–D, G–H): **A**–**D** habitus, dorsal (A, C) and ventral (B, D) views **E**–**F** left male palp, ventral (E) and retrolateral (F) views **G**–**H** epigyne, ventral (G) and dorsal (H) views. Abbreviations: C conductor; dRTA dorsal branch of retrolateral tibial apophysis; E embolus; S spermophor; vRTA ventral branch of retrolateral tibial apophysis.

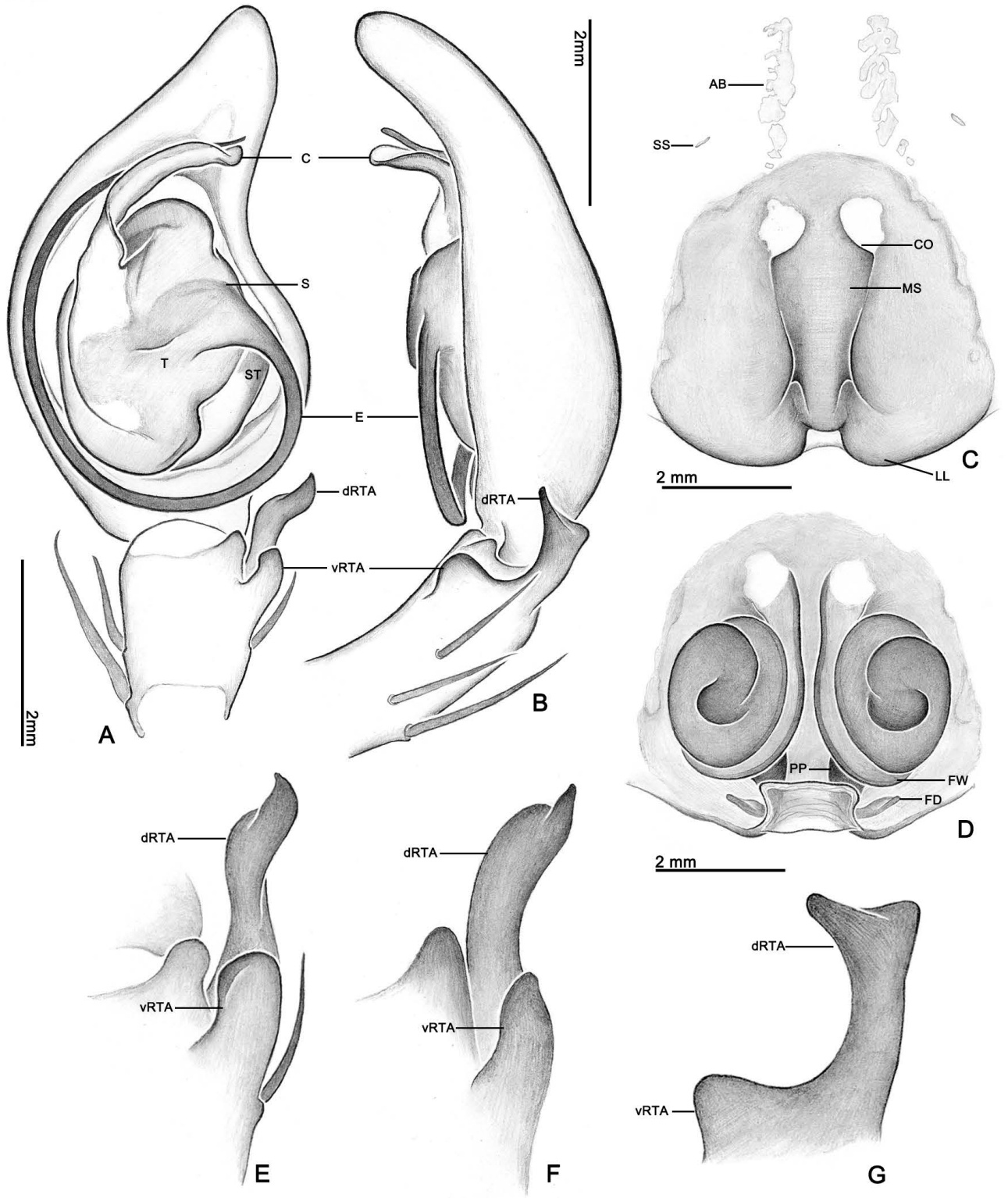

FIGURE 3. *Heteropoda lunula* (Doleschall, 1857), genital features, male from Yunnan, China (A–B, E); female (C–D) and male (F–G) from Singapore: **A**–**B** left male palp, ventral (A) and retrolateral (B) views **C**–**D** epigyne, ventral (C) and dorsal (D) views **E**–**G** retrolateral tibial apophysis (RTA) of left male palp, ventral (E–F) and retrolateral (G) views, without scales. Abbreviations: AB anterior bands of epigyne; C conductor; CO copulatory opening; dRTA dorsal branch of retrolateral tibial apophysis; E embolus; FD fertilization duct; FW first winding of internal duct system; LL lateral lobes of epigyne; MS median septum; PP posterior part of internal duct system; S spermophor; SS slit sensillum; ST subtegulum; T tegulum; vRTA ventral branch of retrolateral tibial apophysis.

Epigyne: In the Singaporean female, the posterior half of the median septum is slightly narrower than in the Vietnamese female, and the small lateral depressions near the posterior end of the median septum are positioned slightly higher; the posterior part of internal duct system (PP) is also narrower and less hemispherically bulging than that of the Vietnamese female (see Jäger 2002: figs 109–110). The margin of the first winding of the internal duct system (FW) is smooth (Figs 2H, 3D) or slightly angular (Jäger 2002: fig. 110).

Distribution. China (Yunnan) **[new record]**, India (Assam), Indonesia (Sumatra, Borneo, Java, Moluccas), Laos, Malaysia (Peninsular states, Sabah), Singapore, Vietnam.

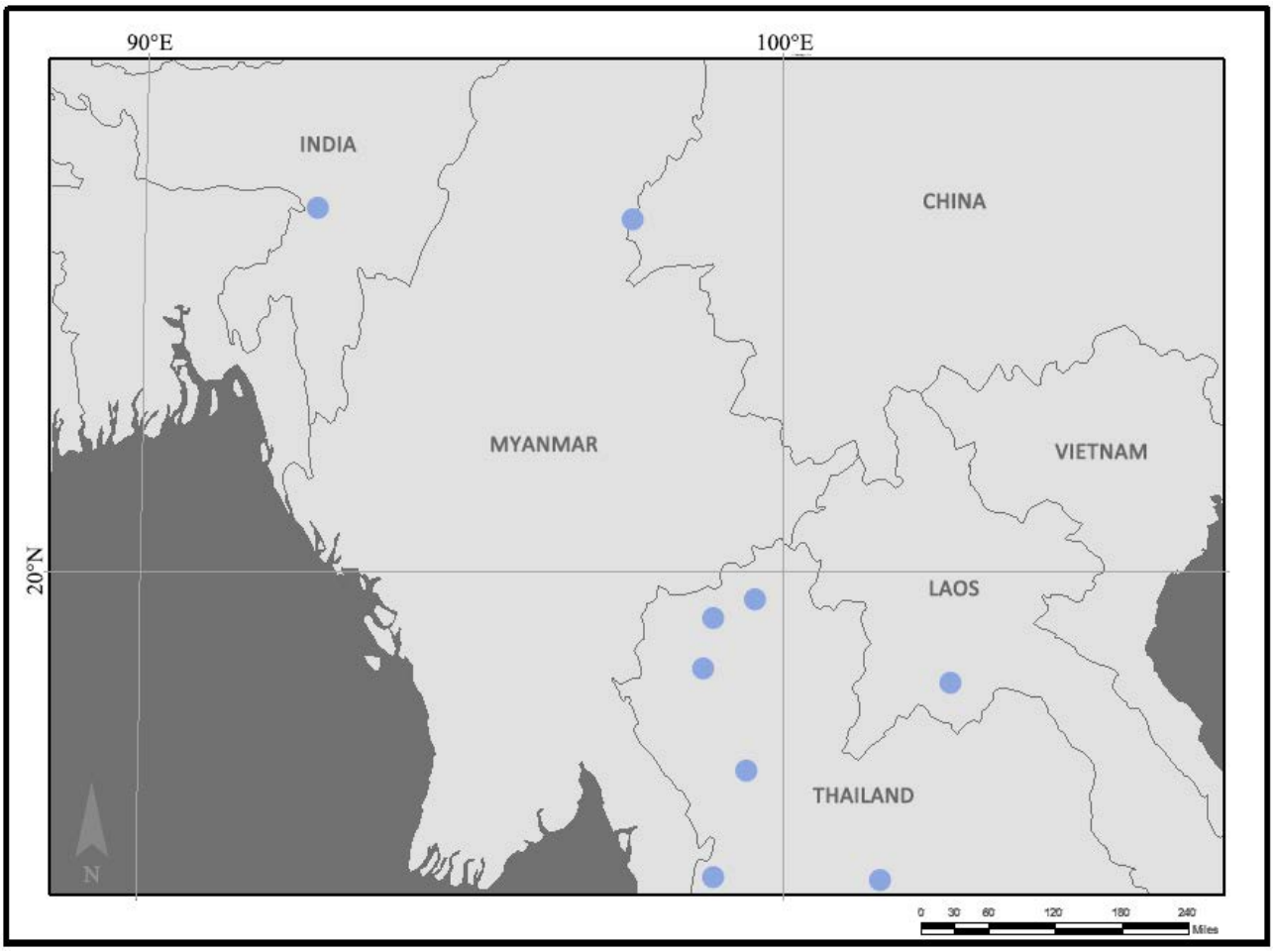

FIGURE 4. Distribution map of *Heteropoda lunula* (Doleschall, 1857) in China and adjacent regions, based on records from historical literature and iNaturalist (https://www.inaturalist.org/, accessed 23.III.2026). Blue-gray dots indicate occurrence localities.

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References

Doleschall L 1857: Bijdrage tot de kennis der Arachniden van den Indischen Archipel. *Natuurkundig Tijdschrift voor Nederlandsch-Indie*, 13: 399–434, pls. 1–2.

https://doi.org/10.5962/bhl.title.66068

Jäger P 2002: Heteropodinae: transfers and synonymies (Arachnida: Araneae: Sparassidae). *Acta Arachnologica*, 51 (1): 33–61. https://doi.org/10.2476/asjaa.51.33

Jäger P 2006: Lengthening of embolus and copulatory duct: a review of an evolutionary trend in the spider family Sparassidae (Araneae). *In:* Deltshev C & Stoev P (Eds) *European Arachnology 2005*. *Acta Zoologica Bulgarica*, Supplement 1: 49–62.

Jäger P & Koh JKH 2024: On some *Heteropoda* species from Southeast Asia with new data on their biology and distribution range and the resurrection of a new species group (Sparassidae: Heteropodinae). *Boletim do Museu Paraense Emílio Goeldi Ciências Naturais*, 19 [3, e2024-1041]: 1–44. https://doi.org/10.46357/bcnaturais.v19i3.1041

Tikader BK & Sethi VD 1990: Studies of some giant crab spiders of the family Heteropodidae from India. Part II. *Records of the Zoological Survey of India*, 87: 165–186.

World Spider Catalog 2026: *World Spider Catalog. Version 27*. Natural History Museum Bern. Available from: http://wsc.nmbe.ch/ (accessed 23.III.2026).

Additional information

Author contributions: Conceptualization: K Yu & A-R Zuo. Supervision: F Zhang. Visualization: K Yu. Writing–original draft: K Yu. Writing–review and editing: A-R Zuo & F Zhang.

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Photo Gallery

棒状派模蛛 *Pimoa clavata* Xu & Li, 2007
Bat Cave [蝙蝠洞], Fangshan, Beijing 北京房山蝙蝠洞，
photograph by Ye-Jie LIN [林业杰]